

ABSTRACT

The invention provides polyol (allyl carbonate) polymer for electrokinetic devices. The devices can be modified for attachment of a chemical moiety or ligand. The electrokinetic devices can be used for a variety of applications, including chemical analysis, biochemical analysis, cell sorting, purification, analytical devices, diagnostic devices, and tissue culture applications. The invention also provides methods of using the polyol (allyl carbonate) polymer electrokinetic devices. The invention also provides for a sensor that allows for the detection of various chemicals, biochemicals, ions, metals, solvents, and bio-polymers.